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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,060	05/23/2001	Hiroshi Fuji	55944 (70904)	1977
21874	7590	10/07/2004	EXAMINER	
EDWARDS & ANGELL, LLP			CASTRO, ANGEL A	
P.O. BOX 55874			ART UNIT	
BOSTON, MA 02205			PAPER NUMBER	

2653

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/864,060

Applicant(s)

FUJI ET AL.

Examiner

Angel A Castro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 18-22 and 28-31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17, 23-27 is/are allowed.
- 6) ☒ Claim(s) 32-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to Amendment filed 6/14/04.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 32 is rejected under 35 U.S.C. 102(b) as being anticipated by Kino et al (U.S. Pat. 5,859,814).

Regarding claim 32, Kino et al discloses a tracking device (figures 1-5) which performs a tracking operation with respect to an information recording medium comprising tracking-use marks formed along recording tracks, whereon information are recorded based on changes in refractive index, wherein the tracking-use marks have a length of not shorter than a diffraction limit of alight beam in a direction along the recording tracks and a width of not wider than the diffraction limit of the light beam in a direction orthogonal to the recording tracks, the tracking device comprising:

an optical slit (figure 2) which allows a light beam to pass therethrough to be guided to the information recording medium; and

tracking means which detects a light beam transmitted through or reflected from the information recording medium, which has passed through the optical slit, and performs a

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tracking operation of the recording tracks based on the transmitted light or the reflected light as detected (column 4, lines 22-24),

wherein the optical slit has a light emitting section, a longitudinal direction of which is set substantially parallel to the longitudinal direction of the recording track, and whose width in a widthwise direction is shorter than the diffraction limit (column 4, lines 21-22 and column 3, lines 38-40).

3. Claims 33-34 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueyanagi (U.S. Pat. 6,396,776).

Regarding claim 33, Ueyanagi discloses an information write/read head for a heat-assisted read/write system, where a recording track on a recording medium is partially heated by projecting thereto a light beam (figure 10), comprising:

a magnetic head 11 for selectively magnetically recording and reading information with respect to the recording track;

an optical guide member 6 including a first surface that receives light of the light beam and a second surface spaced from the first surface, the guide member being configured and arranged so light passes therethrough and is guided to the recording track,

wherein the second surface is configured so as to have a width that is shorter than a diffraction limit of the light beam and so light passes therethrough and is guided to the recording track light (column 10, lines 9-17).

Regarding claim 34, Ueyanagi discloses that the second surface is configured so as to have a length in a longitudinal direction of not shorter than the diffraction limit of the light beam (see figure 11C and column 5, line 58 to column 6, line 17).

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Regarding claim 41, Ueyanagi shows that the magnetic head and the optical guide member are formed in one integral part (see figure 10B).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueyanagi in view of Kino et al (U.S. Pat. 5,859,814).

Regarding claims 35-40, Ueyanagi discloses the information write/read head described above. Ueyanagi does not specifically disclose the optical guide member with the characteristics of the claims. Kino et al discloses information write/read head comprising an optical guide member with all the characteristic claimed in claims 35-40 (see figure 3 and 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the information write/read head comprising an optical guide member with all the characteristic claimed in claims 35-40 as taught by Kino et al.

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the information write/read head comprising an optical guide member with all the characteristic claimed in claims 35-40 as taught by Kino et al as it would allow to separate the

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tracking from the writing as well as providing more control of the parameters of the optical guide.

Allowable Subject Matter

6. Claims 1-17 and 23-27 allowed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Berg et al (U.S. Pat. 6,507,540) discloses a hybrid optical head.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel A Castro whose telephone number is 703-308-8435. The examiner can normally be reached on Monday through Thursday, 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R Korzuch can be reached on 703-305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in cursive script that reads "Angel Castro".

Angel Castro, Ph.D.